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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,858	12/29/2000	Susan R. Santos	30644	8518

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THOMAS B. LUEBBERING  
HOVEY, WILLIAMS, TIMMONS & COLLINS  
2405 Grand, Suite 400  
Kansas City, MO 64108

EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/751,858

Applicant(s)

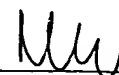
SANTOS ET AL.

Examiner

Susanna M. Diaz

Art Unit

3623



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Final Office action is responsive to Applicant's amendment filed September 24, 2004.

Claims 1, 7, 12, and 17 have been entered.

Claims 1-21 are presented for examination.

2. The previously pending claim objection is withdrawn in response to Applicant's amendment of claim 1.

The previously pending rejection under 35 U.S.C. § 101 is withdrawn in response to Applicant's amendment of claims 12 and 17.

### ***Response to Arguments***

3. Applicant's arguments filed September 24, 2004 have been fully considered but they are not persuasive.

Applicant argues:

With regard to the elements of claim 1, applicant respectfully asserts that Jensen does not teach or suggest date gap or control chart analyses. Date gap analysis as described in the application specification eliminates "the dilution of data that arises with quarterly or monthly data infusions." (Page 10, lines 11-12) Furthermore, "a typical date gap strategy looks at the days between incidents *rather than* the incident rate." (*Id.* at lines 14-15 (emphasis added)). Finally, implementing date gap analysis involves averaging the number of days between events, which average "becomes the center line or standard against which trends and patterns may be identified." (Page 7, lines 20-21.) It will be appreciated that date gap analysis presents several advantages over other forms of analysis. With date gap

analysis, for example, the *timing* of data, including timing trends, is preserved. Furthermore, date gap analysis allows a user to obtain a meaningful report at any time, as opposed to waiting until the end of a month or quarter for a monthly or quarterly report. (Pages 12-13 of Applicant's response)

Applicant's characterization of what date gap analysis involves and what benefits it provides do not qualify as a special definition of "date gap analysis"; therefore, such details will not be read into the claims. As a matter of fact, the specification never expressly defines what "date gap analysis" is. The claims never recite a date gap nor how it is used to perform date gap analysis; therefore, the definition of "date gap" (i.e., "the number of days between events (or, more generally, the amount of time) between the event in question and the previous event" -- see page 7 of the specification) cannot appropriately be read into the claims as inherent to date gap analysis. By Applicant's own admission, "a *typical* date gap strategy looks at the days between incidents rather than the incident rate" (*emphasis added*, page 10 of the specification). The fact that "a *typical* date gap strategy looks at the days between incidents rather than the incident rate" does not preclude an atypical date gap strategy from looking at the incident rate. Again, Applicant's characterization of a date gap strategy is not limiting in nature. Furthermore, looking at Jensen's graphs, it is clear that accidents may be graphed or charted based on frequency by day of week, time of day, and over a given period of time, such as a month, year, or specified date range (Figs. 5-8, 10, 15, 22, 69, 70). For example, Fig. 8 lists specific events and corresponding dates of occurrence. Figs. 69 and 70 allow a user to view accident reports based on the frequency by day of the week or frequency by time of the day. Implicit to a report of the frequency of occurrence of

Art Unit: 3623

events by day, week, time of day, etc. is an understanding of the lapse of time between events. Fig. 8 even isolates specific events and identifies the date of occurrence, thereby lending itself to an understanding of the lapse of time between the specific events. Since all of the details pointed out by the Applicant as corresponding to date gap analysis are not recited in the claims and are not deemed to be part of a special definition of "date gap analysis," these details will not be read into the claims. As such, the Examiner maintains that Jensen teaches a broad, yet reasonable interpretation of "date gap analysis" since Jensen's analysis of accidents in the workplace includes an understanding of the dates of occurrence of accidents, frequencies of occurrence of accidents, etc.

Applicant argues that "Jensen does not disclose a computer-implemented method of averaging a number of days between events and using the average as a center line or standard against which trends and patterns can be identified" (Page 13 of Applicant's response). Again, in response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which applicant relies (i.e., "a computer-implemented method of averaging a number of days between events and using the average as a center line or standard against which trends and patterns can be identified") are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues:

With regard to the control chart analysis limitation of claim 1, it should first be noted that a control chart is not merely any chart that presents data. Rather, a control chart specifically plots a statistic versus time, and is used to determine whether the distribution of data values generated by a process is stable over time. Control charts, for example, typically include upper and lower limits on which values of some statistical measure for a series of samples of subgroups are plotted; and frequently show a central line to help detect a trend of plotted values toward either control limit. Applicant respectfully asserts that Jensen does not teach or suggest such control chart analysis. (Page 14 of Applicant's response)

Regarding control chart analysis, Applicant admits that such analysis is well-known, it "involves performing various general and application-specific statistical algorithms and operations on the data," and "[c]ontrol charts may include plotted averages, plotted ranges, X-bar, and other statistically meaningful graphs" (Page 10 of the specification). Subsequently (on page 10 of the specification), Applicant states, "FIG. 3 shows an X-bar control chart 50 which plots data in sequence with a center line 52 at the overall average and upper and lower control limits 54, 56 computed at a fixed number of standard deviations from the center line 52." Clearly, these features only correspond to the optional X-bar version of a control chart; therefore, until explicitly recited in the claims, these features will not be read into the claimed invention. Again, looking at Jensen's graphs, it is clear that accidents may be graphed or charted based on frequency by day of week, time of day, and over a given period of time, such as a month, year, or specified date range (Figs. 5-8, 10, 15, 22, 69, 70). These types of graphs and charts include "plotted ranges...and other statistically meaningful graphs";

Art Unit: 3623

therefore, they are interpreted as examples of control charts, as broadly recited in the claims.

Applicant argues:

...Applicant respectfully asserts that the workload adjustment described in the Office Action is of an entirely different nature than the workload adjustment used in the application invention and therefore does not render obvious the workload adjustment of the application invention. Applicant's invention, as claimed in claim 1 of the application, makes workload adjustments on *formatted* data in conjunction with date gap and control chart analysis to determine whether workload was a factor in causing a particular signal. (Page 11.) That is, the application invention uses workload adjustments to more correctly *analyze* data relating to workplace trends of any type, not to merely *respond* to accident statistics or dangerous working conditions. It will be appreciated that integrating workload analysis into statistical algorithms to analyze data is substantially more involved and requires special expertise, education and/or experience. (Pages 14-15 of Applicant's response)

The claimed invention does not recite any specific details about how analysis of events is performed beyond the broad recitation of the use of date gap and control analysis.

As discussed above, Jensen addresses a broad, yet reasonable interpretation of both types of analysis. Furthermore, Applicant does not challenge the validity of the Official Notice taken in the art rejection; therefore, all statements of Official Notice made in the art rejection have been established as admitted prior art (see MPEP § 2144.03(C)). It is not clear how the broadly claimed analysis is any different from Jensen's analysis. A workload adjustment based on date gap and control chart analysis (which yield an understanding of the frequency of occurrence of events as well as how many days

occur between events) is necessarily based at least on someone's evaluation of the workload situations. Otherwise, there would be no need to even evaluate the occurrence of events at all.

Applicant argues that Jensen does not teach "allowing a user to request a more specific analysis of at least one identified event" because "[t]he 'more specific analysis,' as used in the present application, involves 'the integration and cross-referencing of data sets, and for the display of multiple control charts, thereby allowing a user to place events of interest in context with other data sets.'" (Page 12, lines 20-22.)" (Page 15 of Applicant's response) Again, in response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which Applicant relies (i.e., "the more specific analysis involves the integration and cross-referencing of data sets, and for the display of multiple control charts, thereby allowing a user to place events of interest in context with other data sets") are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As explained in the art rejection, a user may access additional information regarding a particular incident. For example, Fig. 43 shows a "Performance Analysis" section that summarizes accidents associated with a given individual. "Advanced Investigation," i.e., further analysis, may also be requested.

In conclusion, Applicant's arguments are not persuasive; therefore, the existing art rejection is maintained.



***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (U.S. Patent No. 6,065,000).

Jensen discloses a system for facilitating statistical analysis of events, the system comprising:

[Claim 1] a first input device operable to receive raw data regarding the events, including the nature, place, time, and date of each event, and convert the raw data into formatted data having a suitable electronic format (col. 3, lines 12-15; cols. 9-10, Table 5 (see at least # 20, 22, 29-33, 38); cols. 11-12, Table 6; col. 13, lines 1-12);

a memory storage device operable to store the formatted data (col. 12, line 65 through col. 13, line 14);

a code segment operable to perform date gap analysis and control chart analysis on the formatted data to produce an analysis output (Figs. 5-8, 10, 15, 22, 69, 70 -- Accidents may be graphed or charted based on frequency by day of week, time of day, and over a given period of time, such as a month, year, or specified date range; Figs. 31, 42, 43 -- An assessment of appropriate corrective actions to be taken can be recorded and displayed as an analysis output);

a display device operable to display the analysis output (Figs. 31, 42, 43 -- An assessment of appropriate corrective actions to be taken can be recorded and displayed as an analysis output); and

a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display (Fig. 43; col. 3, lines 12-15; col. 13, lines 1-12 -- A user may access additional information regarding a particular incident. For example, Fig. 43 shows a "Performance Analysis" section that summarizes accidents associated with a given individual. "Advanced Investigation," i.e., further analysis, may also be requested);

[Claim 3] the events involving employee illness and injury (cols. 9-10, Table 5; cols. 11-12, Table 6; col. 13, lines 1-12);

[Claim 4] the analysis output being displayed in a chart format (Figs. 31, 42, 43 -- An assessment of appropriate corrective actions to be taken can be recorded and displayed as an analysis output. The specific corrective action entered is displayed in the row labeled "Corrective Action"; therefore, this display of data is a type of mini chart);

[Claim 6] the second input device being selected from the group consisting of: computer mice, trackballs, light pens, touch sensitive screens, keyboards (col. 3, lines 12-15; col. 13, lines 1-12).

As per claim 1, Jensen provides various examples of date gap analysis and control chart analysis. Jensen also allows information regarding corrective actions

Art Unit: 3623

responsive to workplace incidents to be recorded and displayed; however, Jensen does not expressly teach that a code segment makes workload adjustments based on these analyses. Official Notice is taken that it is old and well-known in the art of workplace management to adjust workloads accordingly in response to dangerous working conditions. For example, an increase in the frequency of accidents and/or dangerous work-related decisions being made by overworked doctors, nurses, truck drivers, etc. have led safety proponents in each respective industry to push for a lower limit on the number of consecutive hours an employee may work. This is an example of a workload adjustment being made in response to analysis of workplace-related injury and accident statistics. Similarly, Jensen is directed toward analysis of workplace-related injury and accident statistics in order to better monitor these incidents for accurate reporting to safety governing bodies, such as OSHA (abstract); therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Jensen to generate corrective actions involving workload adjustments in order to extend the usefulness of Jensen's invention to industries where many workers are negatively affected by poor workload conditions, thereby making Jensen's invention more versatile and comprehensive in nature. Furthermore, the Examiner asserts that the computer automation of a well-known manual process is old and well-known in the art. Computer automation of a well-known manual process facilitates more rapid, efficient, and accurate performance of the process in comparison to the same process performed entirely by hand. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's

Art Unit: 3623

invention to modify Jensen's computer system code segment to make the workload adjustments based on date gap analysis and control chart analysis in order to facilitate more rapid, efficient, and accurate performance of the workload adjustments as opposed to if they were performed entirely by hand.

Regarding claim 2, Jensen's system receives accident reports as users enter them, which may or may not be daily. Accident reports are only entered when accidents occurs; therefore, if accidents did not occur daily, then reports would likely not be entered daily. On the other, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention for Jensen's input device to receive data on a daily basis in order to maintain an accurate and updated account of incidents, especially at a location(s) where reportable incidents occur on a daily basis.

As per claim 5, Jensen displays analysis output in a graphical format, such as a chart format; however, Jensen does not expressly teach that the analysis output may be displayed in a tabular format. Official Notice is taken that it is old and well-known in the art to display data in a tabular form in order to meet the needs of users who prefer their reported data organized and selectable by tabs. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to provide Jensen's users with the option of having the analysis output displayed in a tabular format in order to meet the needs of users who prefer their reported data organized and selectable by tabs.

[Claims 7-11] Claims 7-11 recite limitations already addressed by the rejection of claims 1-6 above; therefore, the same rejection applies.

Furthermore, as per claim 9, the fact that Jensen can filter and sort data by date, incident types, etc. is indicative of the fact that Jensen's invention inherently comprises code segment for separating data into a plurality of data sets based upon a predetermined separation criteria.

[Claims 12-16] Claims 12-16 recite limitations already addressed by the rejection of claims 1-11 above; therefore, the same rejection applies.

[Claims 17-21] Claims 17-21 recite limitations already addressed by the rejection of claims 1-11 above; therefore, the same rejection applies.

Furthermore, as per claim 21, Jensen discloses that different data sets may be analyzed and displayed in resulting charts. For example, Fig. 43 displays a mini chart corresponding to "Accident History," another mini chart corresponding to "Performance Analysis," another one showing "Corrective Action Assigned to," etc. All of these mini charts are displayed simultaneously and are representative of different data sets.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3623

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703)308-1113.

Any response to this action should be mailed to:

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450**

or faxed to:

**(703)305-7687**

[Official communications; including  
After Final communications labeled

Art Unit: 3623

"Box AF"]

**(703)746-7048**

[Informal/Draft communications, labeled  
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 22202, 7<sup>th</sup> floor receptionist.



Susanna M. Diaz  
Primary Examiner  
Art Unit 3623  
October 20, 2004